This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

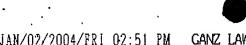1. (currently amended)   An automated system for experimentation comprising:

a communication management system~~n experiment engine operable to define an~~ ~~experiment relating to various treatments for a set of content elements, the experiment engine~~ ~~operable to conduct the experiment over a data network~~supporting the creation and execution of one or more experiments to test the behavior of users to various treatments for a set of content elements; and

an allocator module operable over a data network to systematically allocate a treatment to a user in connection with an experiment.

~~an observation module operable to collect observation data relating to user behavior for~~ ~~each treatment; and~~

~~a scripting / scheduling engine operable to coordinate the operation of the experiment~~ ~~engine and the observation module.~~

2. (currently amended)   The system of Claim 1 wherein the communication management system~~experiment engine~~ is operable to identify elements of content which may influence user behavior.

3. (currently amended)   The system of Claim 1 wherein the communication management system~~experiment engine~~ is operable to implement statistical sampling procedures to deliver over the data network the various treatments to respective control groups of users.

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4. (currently amended)   The system of Claim 1 wherein the <u>communication management system</u><s>experiment engine</s> is operable to store data relating to the set of content elements, objective user behavior to be observed, and users allocated to receive treatment during the experiment.

5. (currently amended)   The system of Claim 1 wherein the <u>communication management system</u><s>experiment engine</s> comprises an experiment manager object operable to control the execution of the experiment.

6. (currently amended)   The system of Claim 1 wherein the <u>communication management system</u><s>experiment engine</s> comprises an experiment manager object operable to specify different treatments of content.

7. (currently amended)   The system of Claim 1 wherein the <u>communication management system</u> <s>experiment engine</s> comprises an experiment manager object operable to define and implement statistical sampling procedures.

8. (currently amended)   The system of Claim 1 wherein the <u>communication management system</u><s>experiment engine</s> comprises an experiment manager object operable to record the experiment under way and the participating users.

9. (currently amended)   The system of Claim 1 wherein the <u>communication management system</u><s>experiment engine</s> comprises an experiment data store operable to store experiment data.

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10. (original)   The system of Claim 1 wherein the data network comprises the Internet.

11. (currently amended)   The system of Claim 1 ~~wherein the~~further comprising an observation module operable to collect observation data relating to actual behavior of users to each treatment~~comprises an observation access object operable to provide access to the~~ ~~observation data~~.

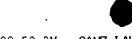12. (currently amended)   The system of Claim 1 wherein the communication management system~~experiment engine~~ is operable to generate a set of experiment rules for allocating treatments during the experiment.

13. (currently amended)   The system of Claim 1 further comprising an interface in communication with the communication management system ~~experiment engine~~, the interface operable to allow a user to interact with the communication management system ~~experiment~~ ~~engine~~ to define the experiment.

14. (cancelled)

15. (currently amended)   An automated method~~experimentation~~ comprising:
        defining an experiment to gauge user reaction~~relating~~ to various treatments for a set of content elements;
        conducting the experiment over ~~the~~a data network; and
        collecting over the data network observation data relating to user behavior for each treatment~~; and~~

~~generating at least one script to coordinate defining an experiment, conducting the~~
~~experiment, and collecting observation data.~~

16. (original)   The method of Claim 15 wherein defining an experiment comprises:

identifying desired objectives for user behavior;

identifying which treatments may influence user behavior related to the desired

objectives; and

generating the various treatments using different combinations of the content elements.

17. (original)   The method of Claim 16 further comprising:

defining at least one control variable for the various treatments; and

assigning a respective level for the control variable for each treatment.

18. (original)   The method of Claim 15 wherein conducting the experiment comprises:

selecting at least one treatment for delivery to users;

grouping users into a plurality of segments, each segment comprising users with similar

behavioral characteristics; and

specifying a particular segment of users to receive the selected treatment.

19. (original)   The method of Claim 15 wherein conducting the experiment comprises:

statistically sampling to specify a plurality of control groups, each control group

comprising at least one user;

specifying a particular treatment to be delivered to the at least one user in each control

group;

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receiving identical requests for content from the respective at least one user in each of

the control groups; and

in response to the identical requests, delivering to the at least one user in each control

group a different treatment.

20. (original)   The method of Claim 19 further comprising observing site-related behavior of

users receiving the various treatments.

21. (original) The method of Claim 15 wherein the data network comprises the Internet.

22. (original)   The method of Claim 20 wherein collecting observation data comprises recording

observed behavior in each control group during the experiment.

23. (original)   The method of Claim 15 further comprising identifying elements of content which

potentially influence behavior of users.

24. (currently amended)   An automated system for experimentation comprising:

a content system operable to store content, the content comprising a set of content

elements; and

a communication management system in communication with the content system and

operable to define an experiment relating to various treatments for the set of content elements,

conduct the experiment over a data network, collect over the data network observation data

relating to user behavior for each treatment, and generate at least one script for coordinating the

operation of the content system and the communication management system.

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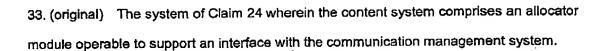   Serial No. 09/648,429

25. (original)   The system of Claim 24 wherein the communication management system is operable to identify content elements which may influence user behavior.

26. (original)   The system of Claim 24 wherein the communication management system is operable to implement statistical sampling procedures to deliver over the data network the various treatments to respective control groups of users.

27. (original)   The system of Claim 24 wherein the communication management system is operable to generate a set of experiment rules for allocating treatments during the experiment.

28. (original)   The system of Claim 24 wherein the content system is operable to allocate treatments to users according to the experiment rules.

29. (original)   The system of Claim 24 wherein the communication management system is operable to group users into a plurality of segments, each segment comprising users with similar behavioral characteristics.

30. (original)   The system of Claim 24 wherein said data network comprises the Internet.

31. (original)   The system of Claim 24 wherein the communication management system is operable to define at least one control variable for the various treatments and to assign a respective level for the control variables for each treatment.

32. (original)   The system of Claim 24 wherein the content system and the communication management system are connected to the data network.

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33. (original)   The system of Claim 24 wherein the content system comprises an allocator module operable to support an interface with the communication management system.

34. (original)   The system of Claim 24 wherein the communication management system comprises an allocator interface object operable to support an interface with the content system.

35. (original)   The system of Claim 24 further comprising a content provider interface operable to support an interface between the communication management system and a manager user.

36. (original)   An automated system for experimentation comprising:

an experiment engine operable to define an experiment relating to various treatments for a set of content elements, the experiment engine operable to allocate each treatment to a separate control group of users over a data network;

an observation module operable to collect observation data relating to user behavior for each treatment; and

a scripting / scheduling engine operable to coordinate the operation of the experiment engine and the observation module.

37. (original)   The system of Claim 36 wherein the experiment engine is operable to identify elements of content which may influence user behavior.

38. (original)   The system of claim 36 wherein the experiment engine is operable to implement statistical sampling procedures to deliver over the data network the various treatments to respective control groups of users.

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39. (original)   The system of Claim 36 wherein the data network comprises the Internet.

40. (original)   An automated method for experimentation comprising:

defining an experiment relating to various treatments for a set of content elements;

allocating each treatment to a separate control group of users over a data network;

collecting over the data network observation data relating to user behavior for each treatment; and

generating at least one script to coordinate defining an experiment, conducting the experiment, and collecting observation data.

41. (original)   The method of Claim 40 wherein the data network comprises the Internet.

42. (original)   The method of Claim 40 further comprising identifying elements of content which potentially influence behavior of users.

43. (original)   A method for on-line experimentation comprising:

defining a plurality of treatments for a set of content elements;

providing a website on a data network;

receiving requests for content from users accessing the website on the data network;

statistically sampling to create at least one control group of users;

allocating over the data network a first treatment to each user in the control group;

allocating over the data network a second treatment to each user not in the control group;

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collecting observation data for observed behavior of users in the control group and users

not in the control group; and

generating at least one script to coordinate allocating the first and second treatments

and collecting observation data.

44. (original)   The method of Claim 43 further comprising identifying elements of content which

may influence user behavior.

45. (original)   The method of Claim 43 wherein providing a website comprises providing a web

page at which the set of content elements is available in the form of any of the treatments.

46. (original)   The method of Claim 43 wherein the data network comprises the Internet.

47. (new)   The system of claim 1 wherein the set of content elements are content elements

for a web page.

48. (new)   The system of claim 47 wherein the data network is the Internet.

49. (new)   The system of claim 2 wherein content comprising a plurality of the content

elements is configured to influence user behavior in accordance with observations from an

experiment.

50. (new)   The system of claim 1 wherein the system includes a model engine to determine

what set of content elements is most suitable for achieving a desired outcome.

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51. (new)   An online experimentation system configured to create various treatments for a set of content elements and to allocate the treatments to users to test user behavior in response to the various treatments, the system being further configured to capture data relating to the observed behavior of users relative to the various treatments.

52. (new)   The system of claim 51 wherein the system is configured to assess how content element variables drive user choices or behavior.

53. (new)   The system of claim 51 wherein the system is configured to generate a set of rules that dictate how treatments are allocated to particular users.

54. (new)   A computer implemented method comprising:

creating various treatments for a set of content elements and to allocate the treatments to users to test user behavior in response to the various treatment;

allocating the treatments to users; and

capturing data relating to the observed behavior of users relative to the various treatments.

55. (new)   The method of claim 54 further comprising assessing from captured data how content element variables drive user choices or behavior.

56. (new)   The method of claim 54 further comprising generating a set of rules that dictate how treatments are allocated to particular users.

57. (new)   An machine readable medium including a set of instructions for:

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creating various treatments for a set of content elements and to allocate the treatments

to users to test user behavior in response to the various treatment;

allocating the treatments to users; and

capturing data relating to the observed behavior of users relative to the various

treatments.

58. (new)   The machine readable medium of claim 57 wherein the medium includes

instructions for assessing from captured data how content element variables drive user choices

or behavior.

59. (new)   The machine readable medium of claim 57 wherein the medium further includes

instructions for generating a set of rules that dictate how treatments are allocated to particular

users.

60. (new)   The system of claim 1 wherein a treatment is allocated to a user according to

experiment rules, prediction rules, or user defined rules.

61. (new)   The method of claim 15 wherein treatments are allocated to users according to

experiment rules, prediction rules, or user defined rules.

62. (new)   The medium of claim 57 wherein the allocating is according to experiment rules,

prediction rules, or user defined rules.

63. (new)   The computer readable medium of claim 58 wherein the instructions are

included for analyzing captured data using a multivariate statistical modeling technique to

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determine what content elements in a treatment influenced the probability of an outcome in terms of users behavior or reaction to treatments.

64. (new)   The system of claim 1 wherein the system is operable to create and execute a designed experiment.

65. (new)   The system of claim 11 wherein a model engine is in communication with the observation module, the model engine operable to generate a model for predicting anticipated behavior of users based upon the observation data relating to actual behavior.

66. (new)   The system of claim 65 further comprising a model engine in communication with the observation module, the model engine operable to generate a model for predicting anticipated behavior of users based upon the observation data relating to actual behavior. .

67. (new)   The system of claim 66 further comprising a prediction engine in communication with the model engine, the prediction engine operable to deliver one of the treatments to users according to the model in order to optimize a desired outcome.

68. (new) The system of Claim 67 wherein the prediction engine implements a personalization process.

69. (new)   The system of Claim 68 wherein the prediction engine segments users into a plurality of segments, each segment comprising users with similar behavioral characteristics.

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70. (new)   The system of Claim 69 wherein the prediction engine is operable to generate a set of prediction rules for allocating treatments to users with specific behavioral characteristics.

71. (new)   The system of Claim 70 comprising an interface in communication with the experiment engine, the interface operable to allow a user to interact with the experiment engine to define the experiment.

72. (new)   A method performed on a computer for automatically managing communication comprising:

defining an experiment relating to various treatments for a set of content elements;

conducting the experiment over a data network;

collecting over the data network observation data relating to actual behavior of users to each treatment; and

generating a model for predicting anticipated behavior of users based upon the observation data relating to actual behavior; and

generating at least one script to coordinate defining an experiment, conducting the experiment, collecting data, and generating a model.

73. (new)   The system of Claim 24 wherein the communication management system is operable to generate a set of prediction rules for allocating treatments to users with specific behavioral characteristics.

74. (new)   The system of Claim 73 wherein the content system is operable to allocate treatments to users according to the prediction rules.

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75. (new)   The system of Claim 24 wherein the communication management system implements a personalization process.

76. (new)   The method of claim 15 wherein the experiment is delivered over the data network to respective control groups of users according to the experiment and wherein the method further comprises generating a model for predicting anticipated behavior of users based upon the observed behavior; and generating a prediction for delivering one of the treatments to users according to the model in order to optimize a desired outcome.

77. (new)   The method of Claim 76 wherein defining an experiment comprises identifying elements of content which potentially influence behavior of users.

78. (new)   An automated system for delivery of content, comprising:

a communication management system including a prediction engine configured to generate predictions on how users who are to be presented a treatment comprising a set of content elements will react to the treatment, the prediction engine generating predictions based on data collected from one or more experiments that tested user behavior to content elements in the set, the communication management system delivering treatments to users in accordance with the predictions to increase the probability of a desired user behavior in response to the presented treatment.

79. (new)   An automated method, comprising:

generating predictions on how users who are to be presented a treatment comprising a set of content elements will react to the treatment, the predictions being

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generated from data collected from one or more experiments that tested user

behavior to content elements in the set; and

delivering treatments to users in accordance with the predictions to increase the

probability of a desired user behavior in response to the presented conduct.

80. (new)   A machine readable medium including a set of instructions for:

generating predictions on how users who are to be presented a treatment

comprising a set of content elements will react to the treatment, the

predictions being generated from data collected from one or more

experiments that tested user behavior to content elements in the set; and

delivering treatments to users in accordance with the predictions to increase the

probability of a desired user behavior in response to the presented

conduct.

81. (new)   A content page comprising a set of content elements generated by a prediction

engine, the prediction engine generating predictions based on data collected from one or

more experiments that tested user behavior in response to content elements in the set.

82. (new)   The system of claim 64 wherein the designed experiment reduces the number of

combinations included in the experiment by measuring and estimating only those effects

that are of a predetermined interest.

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